



2829

Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

4 March 2004

Re:

William H. Swain, inventor

Error Correction by Selective Modulation

SN 08/579,395; Filed 12/27/95; Art Unit 2829

Primary Examiner: Mr. Ernest F. Karlsen

Reactivation of my Petition to the Commissioner for Patents so that my appeal will go forward.

Greetings,

Having spoken with Mrs. Kammie Cuneo on 12 February 2004, I request that my petition to the Commissioner for Patents of 28 November 2003 be reactivated so that my 24 April 2003 brief for appeal from final rejection of all claims will go forward.

This case was made special on 26 November 2002, yet 7 months after filing my brief, the Examiner stated:

Examiner  
18 Nov. 03  
Page 2, Lines 5-8

"The above procedure returns the status of the Applicant's application to its status prior to the Final Rejection, that is, under rejection with a restriction in place. Applicant's response of December 18, 2001 failed to comply with the requirements of the Restriction Requirement of October 31, 2001..."

This October 31, 2001 requirement to restrict was withdrawn by the Examiner's Action.

Examiner  
25 Sept. 02  
Page 2, Lines 1-3

1. In response to requirements to elect applicant has argued that there are no patentably distinct inventions or species. Therefore, the Restriction Requirement of October 31, 2001 is withdrawn.

None-the-less, my Appeal appears to be set back 2 years.

In an effort to move my appeal forward I responded to the Examiner's Action<sup>1</sup>, withdrew petitionable issues from my appeal<sup>2</sup>, and petitioned to the Commissioner for Patents asking that this fourth restriction be removed<sup>3</sup>. I also spoke with Mr. Clayton LaBalle and Mrs. Kammie Cuneo. My note of 17 February 2004 is attached.

Sincerely,

William H. Swain  
Inventor

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- 1) My response is dated 28 November 2003. The petitionable issues are withdrawn on page 1, paragraph 2, 6, and 7.
  - 2) Petitionable issues were also withdrawn in my petition of 28 November 2003, page 4, paragraph 6; and also page 5, paragraph 4. I enclose a 4 March 04 replacement section 6, page 43 for use in my appeal instead of the 24 April 03 sheet.
  - 3) I asked that the Requirement to Restrict be withdrawn in my Petition page 5, last paragraph, i.e., paragraph. 6.5.



Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

17 February 2004

Re:

Application No. 08/579,395

Filing Date: 12/27/1995

Inventor: William H. Swain

Confirmation No: 4200

Examiner: Karlson, Ernest F.

Art Unit: 2829

Notes Relating to a Telephone Conference of 12 Feb 04 between Mrs. Kammie Cuneo, and William Swain regarding Application 08-579-395. Mrs. Cuneo asked Mr. Clayton LaBalle to join us.

Greetings,

I hope that these views of mine will clarify some of the issues we discussed.

1. Restriction is not needed. The Invention is one.

There are no patentably distinct inventions or species. The Examiner accepted this when he wrote in his final rejection:

Examiner	1. In Paper No.29 the examiner stated:
29 Jan 03	"In response to requirements to elect Applicant has argued that
Page 2, par. 1	there are no patentably distinct inventions or species. Therefore, the
and par. 2.	Restriction Requirement of October 31, 2001 is withdrawn.

I said the same with more detail in my latest response. For example:

Swain	<u>Basic Concept and Requirement to Restrict</u>
Last paragraph	
p. 5; 18 Nov 03	

*The basic concept of this invention includes a sensor based on the above primary teaching plus means to properly control the magnitude of the operating parameter. It is included in generic claims 45 plus 63-66. The basic concept is also in one form or another in each one of claims 32-62. So no one claim is patentably distinct from another. Thus the present requirement to restrict is as improper as the three (3) previous requirements<sup>1</sup> which were withdrawn by the Examiner.*

<sup>1</sup> The first three (3) requirements to restrict were in examiner's actions dated 21 February 1997, 28 January 1999, and 31 October 2001.

Swain  
par. 10  
p. 7; 18 Nov 03

*The basic concept, which includes the primary teaching (the Discovery and the Essential Characteristic) is contained in one form or another in each and every one of claims 32-66. Therefore, no one claim would be patentably distinct from any other claim. This is especially true of generic claims 45 plus 63-66.*

## 2. One Basic Concept for Two Species.

After reading my 1995 Application it should come as no surprise that there are now two species, each of which uses the basic concept. This includes the Discovery which is used in both the Combiner Species and the Better SNR species. The DISCOVERY is:

Swain  
1995  
page 11, par. 3

### **DISCOVERY**

*The inventor discovered that the output  $V$  of many Swain Meter clamps was a lot less sensitive ( $1/2$  to  $1/3$  in some sensors) to a change in the intensity of a non-uniform magnetic field  $H_n$  when the magnitude of an operating parameter  $I_{sm}$  was doubled or tripled. And the sensitivity (gain) to a change in signal input current  $I$  stayed constant to within a few percent.*

Page one of my 1995 Application alludes to the Combiner Species:

Swain  
1995  
page 1, par. 3

*The method used is usually to find or construct a sensor which has a signal to noise ratio SNR which changes a lot when its operating parameter is selectively modulated. The output of the lower noise sensor is combined with the output of the higher noise sensor so that, in the ideal case, the noise cancels, but a good signal remains. The easier way may be to take part of the output of the higher noise sensor and subtract it from the output of the lower noise sensor. Two sensors can be used, or the operating parameter of one sensor can be modulated (driven) from a higher to lower noise state.*

The first page of my 1995 Application also alludes to the Better SNR species:

Swain  
1995  
page 1, par 7

*In a simpler form, SNR is substantially improved by operating at a more favorable operating parameter magnitude. Noise is not canceled, but this form can be faster and cost less.*

The basic concept also includes the Essential Characteristic plus means to govern the Operating Parameter. The Essential Characteristic is shown in 1995 Figure 5, most recently in "The Invention" section of my response of 28 November 2003, pages 3 - 5. Means to govern the Operating Parameter are shown in 1995 figures 9 and 11, and elsewhere in the Application.

As early as 19 March 1997 I put forth the idea of the Combiner species as follows:

Swain  
20 March 1997  
page 5, par. 5

*The MEC Meter shown in exhibit III\* is still more accurate near a magnet as stated in the boxed sector. The Clip\*\* and Indicator are constructed so that the zero offset error due to a nearby magnet can be largely eliminated (canceled) by subtracting (combining) the result of two states of the Operating Parameter Q, which is now  $I_{sm}$  in a MEC meter.*

Exhibit III is a technical data sheet for the MEC meter.

I also put forth the idea of the Better SNR species as follows:

Swain  
20 March 1997  
page 5, par. 4

*A relatively simple implementation (genus) of the basic concept is shown in exhibit II\*, and described in new claim IIN. We have sold some MER Meters, and they work better than the Standard DC Amp Clip\*\* when it comes to accuracy near a magnet. The MER Clip and Indicator are constructed so that the SNR is improved by a factor of 2 or 3, as stated in the boxed sector in exhibit II.*

Exhibit II is a technical data sheet for the MER Meter.

That the basic concept is in every one of the then claims 1 - 13 plus new claims IN - IVN is made clear on page 1.

Swain  
20 March 1997  
page 1, par 2

*My traverse relies on the fact that the basic concept (Claim IN) is in every claim, so no claim would be patentable over another because it would lack novelty outside of this specification.*

Please note that reliance is on the basic concept, not (Claim IN). Here (Claim IN) is an illustration of one form of the basic concept.

The Examiner accepted my Traverse of a restriction requirement:

Examiner  
22 Sept. 98  
page 2, par. 1

*1. Because Applicant has indicated that no patentably distinct inventions or species are present the Restriction Requirements of February 21, 1997 and January 16, 1998 are withdrawn. It is noted that Applicant states on page 1 (actually the second page) of the Amendment of May 29, 1997: "My traverse relies on the fact that the basic concept (claim 14) is in every claim, so no claim would be patentable over another because it would lack novelty outside of this application."*

### 3. Claim Selection

In the above, reliance is on the Basic Concept. The (Claim 14) is an illustration. I did not select claim 14 as the one claim on which all stand or fall. If this must now be done, I select generic method claim 66.

### 4. All claims include the Basic Concept, yet all claims are different.

The basic concept<sup>2</sup> is included in one form or another in all claims, old and new, including present claims 32 - 66. Yet it can be seen that they differ. Some are broad and/or brief, and some are detailed and/or narrow. Some are for apparatus and some are for method. Some are for the combiner species, some are for the Better SNR species. Still others include both species and are called generic. However, the claims are not patentably distinct in any significant way because some form of the Basic Concept appears in each.

Generic method claim 66 is considered stronger than generic apparatus claim 45. It has been requested that claim 66 be examined on merit if all must stand or fall on one claim. I never chose claim 45 for this.

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<sup>2</sup> One form of the Basic Concept is included in claim 14. Claim 14 started out as claim IN in March 1997. It was later renumbered to claim 14. Both are now canceled, but present generic claim 45 is similar. Other forms of the Basic Concept are included in generic claims 63 - 66.

I have never seen an Examiner's review of the merits of 3 year old generic claims 63 - 66. This is requested because method generic claim 66 is now considered stronger.

Respectfully submitted,



William H. Swain  
Applicant  
17 February 2004

6 Issues Summarized; revised 3 March 04.

Old section 6, filed 24 April 2003 is withdrawn. The following is its replacement.

6.1 Generic method claim 66, viewed in the light of the disclosure, has elements not found in any of the cited references.

Argument is given in section 8.66, page 85.

6.2 Generic apparatus claim 45, fully viewed in the light of the disclosure, has elements not found in any of the cited references.

Argument is given in section 8.45, page 59.

6.3 All pending claims 32 - 66, fully viewed in the light of the disclosure, have elements not found in any of the cited references.

Argument is given in section 8. Since all pending claims 32 - 66 include the Basic Concept in one form or another, and since generic claims 45 plus 63 - 66 include the same basic concept more fully, support which validates the generic claims also validates the species claims.